

REMARKS

At the outset, the Examiner is thanked for the courtesy extended in granting the interview of October 2, 2003. The Examiner is also thanked for his indication that applicant's amendment filed August 20, 2003 appears to overcome most of the issues raised in the May 20, 2003 official action. The interview therefore focused on what appears to be the remaining issue, specifically, if the methods of the instant claims require a step to correlate a phenotype change with the presence of SRMs. For completeness of the record, applicants submit herewith remarks which further support the position that the claims as amended in the August 20, 2003 response are allowable.

**THE CLAIMS ARE FULLY ENABLED BY THE DISCLOSURE IN THE
SPECIFICATION**

Claims 1, 5-7, 9-15, 17, 21, and 32-34 are rejected under 35 U.S.C. §112, first paragraph. Applicants respectfully submit that the claims are allowable.

First, considering the existing steps in the claims, it is respectfully submitted that these provide an effective, self-contained method for determining whether a specified target gene is silenced in a plant. As stated in the discussion on page 26, lines 14-24 of the specification, the SRMs were consistently found in contexts where PTGS were occurring and were never found where it wasn't. A further step of "confirming" the silencing by looking for a phenotypic change would be redundant since the present application has already proved the utility of SRMs as an unambiguous indicator of silencing.

Second, an extra "phenotype testing" step would allow the SRM detection technology to be used while bypassing the claim.

This would unfairly allow a competitor to use applicant's discovery, without infringing the claims.

Third, an extra "phenotype testing" step would lead to complications in construing the claim in respect of silencing of viral genes (see "RNA-mediated..." pages 25-26 of the application). In such cases the target gene for the method is in the plant, but is viral. It is possible that viral-silencing may not be considered a phenotype change or trait of the plant.

Fourth, the Examiner refers in the office action mailed May 20, 2003, at page 6, line 15-16, to random, unknown genes. However the claims as presently worded require a knowledge of the target gene sequence, so the question of random, unknown genes seems to be moot.

Fifth, the Examiner refers in the office action mailed May 20, 2003, at page 6, line 20-21; page 7, line 3-7 to situations in which silencing correlates to a phenotype change. Applicants admit that in most cases of gene silencing a detectable phenotypic change will occur (and indeed this correlation helped to prove the concept in the first place). Applicants do not agree, however, that the present claims, which recite uses of the invention (not methods of verifying it) need to recite a step of testing phenotype in order to be allowable.

Finally, the Examiner queries in the office action mailed May 20, 2003, at action page 6, line 21 - page 7, line 1 why one would expect to find SRMs where there is no phenotypic change. With respect, the skilled person does expect, in the light of the disclosure, to be able to detect silencing of a target gene by detecting SRMs sharing sequence identity with it. Therefore, since SRMs answer the question of whether or not the gene is silenced, one could rather ask why would the skilled person go on to also investigate gene silencing using a second method, namely change of phenotype?

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requirements of 35 U.S.C. §112, first paragraph, and request that the rejection of the claims under 35 U.S.C. §112, first paragraph be withdrawn.

CONCLUSION

In view of the response filed August 20, 2003, and the remarks presented herein, it is respectfully urged that the rejections set forth in the May 20, 2003 Official Action be withdrawn and that this application be passed to issue. In the event the Examiner is not persuaded as to the allowability of any claim, and it appears that any outstanding issues may be resolved through a telephone interview, the Examiner is requested to telephone the undersigned attorney at the phone number given below.

Respectfully submitted,

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